Testimony of Chairman James J. Hoecker Federal Energy Regulatory Commission before the

Subcommittee on Energy Research, Development, Production and Regulation Committee on Energy and Natural Resources United States Senate

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Mr. Chairman and Members of the Subcommittee:

Good morning. I am James Hoecker, Chairman of the Federal Energy Regulatory Commission. Thank you for inviting me to participate in today's hearing on the challenges facing the electricity markets in the Northwest.

The Commission has long promoted competition in the wholesale power markets in the Northwest and elsewhere across the Nation. Competitive markets can foster a more efficient electricity industry and deliver to consumers reliable electric service at the lowest reasonable cost. The Commission's goal is to rely on competition to bring consumers better services and real economic benefits over time. The Commission remains diligent about its statutory mandate to ensure that the rates and terms of service for wholesale electric sales and transmission are not unjust or unreasonable, unduly discriminatory or preferential. That mandate has been used by the Commission to make wholesale markets open and fair and to foster a viable competitive environment. Where necessary, however, the Commission must curb market power and protect consumers through conventional regulatory means. The Commission's task of venturing beyond its conventional mission to promote competitive markets and light-handed regulation is

complicated by the dramatic price volatility that has accompanied industry restructuring in some regions.

My testimony today will first describe the scope of the Commission's regulatory interest and authority and then discuss the wholesale market in the Northwest, including recent price volatility in certain electricity markets, the state of electric restructuring and electric competition issues. Finally, I will describe the steps the Commission is taking and recap my proposals for legislative changes that will be necessary to ensure competition and consumer protection in electric energy markets.

I. The Commission's Role in Electricity Markets

The Commission's primary role in electricity markets is specified by the Federal Power Act (FPA). FPA Sections 205 and 206 give the Commission jurisdiction over the rates, terms and conditions of sales for resale of electric energy and transmission service in interstate commerce by public utilities. FPA Section 203 gives the Commission jurisdiction over public utility transfers of ownership or control of facilities used for these services. "Public utilities" regulated under FPA sections 203, 205 and 206 include investor-owned utilities but exclude government-owned utilities (such as the federal power marketing agencies and municipal utilities) and most cooperatively-owned utilities. Thus, the Commission's authority under FPA sections 203, 205 and 206 does not apply to many of the key participants in the Northwest electricity markets, such as the public utility districts and cooperatives financed by the Rural Utilities Service.

The Commission may not regulate retail sales or local distribution of electricity.

These are matters left to the states by the FPA.

Although the Commission does not generally have authority over electricity generation facilities, the Commission licenses the construction of non-federal hydroelectric projects and oversees the operation and safety of these non-federal facilities under Part I of the FPA. The Commission has no such licensing authority with respect to federally-owned hydroelectric facilities.

The Commission also has only limited jurisdiction over the Bonneville Power Administration, which is not a public utility subject to regulation under sections 203, 205 or 206 of the FPA. The Commission has authority over the rates charged by Bonneville for power and transmission under the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act). Under section 7 of the Northwest Power Act, the Commission confirms and approves, on both an interim and final basis, Bonneville's power and transmission rates. Pursuant to section 7(a)(2) of the Northwest Power Act, the Commission evaluates Bonneville's rates for power sales within the Northwest region, for firm power sales outside the Northwest region, and for transmission of non-federal power to ensure that the rates: (a) are sufficient to repay the federal investment in the Federal Columbia River Power System over a reasonable number of years after first meeting Bonneville's other costs; (b) are based on Bonneville's total system costs; and (c) insofar as transmission rates are concerned, equitably allocate the costs of the federal transmission system among all users of the system, federal and non-federal. Under

section 7(k) of the Northwest Power Act, the Commission evaluates Bonneville's rates for non-firm sales outside the Northwest region to ensure the rates are established: (a) having regard to the recovery of the cost of generation and transmission of such power; (b) so as to encourage the most widespread use of Bonneville power; (c) to provide the lowest possible rates consistent with sound business principles; and (d) in a manner which protects the interest of the United States in amortizing its investments in the projects within a reasonable period.

The responsibility for developing Bonneville's rates in the first instance is vested with Bonneville's Administrator. The rates are then submitted to the Commission for review. The Commission can approve, disapprove or remand the rates submitted to it for review; unlike the Commission's regulation of traditional public utility rates, the Commission cannot modify Bonneville's proposed rates. Bonneville's rates are not reviewed under the traditional just, reasonable, and non-discriminatory standard applied to public utilities under the FPA.

Finally, Bonneville offers transmission service to others under an "open access" tariff that has been reviewed by the Commission. This tariff provides Northwest market participants with certainty about the rates, terms and conditions for use of Bonneville's transmission service, allowing participants to rely on this information in pursuing trading opportunities.

II. Wholesale Electricity Markets in the Northwest

As I will describe in more detail below, the Commission's staff is currently investigating bulk power markets in various regions of the country, including the Northwest. The staff's report is due to be submitted to the Commission by November 1, 2000. Thus, my views on recent market conditions and the possible need for changes in those markets are only preliminary at this time.

The Northwest region obtains much of its electricity from hydroelectric facilities. According to the Western Systems Coordinating Council (WSCC), the Northwest Power Pool Area (defined as all or part of seven northwestern states and two Canadian provinces) has 72,000 MW of generating capacity, consisting of approximately 65% hydroelectric facilities, 25% coal facilities and a small amount of nuclear, gas and miscellaneous facilities. While the availability of the hydropower capacity varies considerably by season and from year-to-year, depending on the amount of rain and snow, this capacity has long allowed the Northwest to maintain comparatively low retail rates for electricity.

Also according to the WSCC, the Northwest Power Pool Area is planning to add approximately 6,300 MW of generating capacity between the years 2000 and 2009. Most of this amount (4,570 MW) is expected to be natural gas-fired combined cycle facilities. During this same period, the area's winter peak demand is projected to increase by approximately 12,000 MW or more than two percent annually.

The electricity from much of the region's total generation capacity is sold by Bonneville. Bonneville sells its firm power at cost-based rates and its non-firm power at market-based rates. Bonneville also controls approximately 15,000 circuit miles of transmission lines, representing over 70% of the total transmission system in the four-state area within the scope of the Northwest Power Planning Council.

International trading of electricity is a significant factor in the Northwest region.

In particular, the Northwest region trades extensively with the Canadian provinces of British Columbia and Alberta.

The years 1997, 1998 and 1999 were times of relatively large supplies of hydropower. Combined flows on the Columbia River and California systems in those years exceeded the average, while year 2000 flows have been below the average.

The Northwest region is part of a large and highly integrated electrical system known as the Western Interconnection. This interconnection includes 1.8 million square miles within 14 western states and parts of Canada and Mexico. It provides electric service to 65 million people. During summer, when demand is high in California and water is typically available, the Northwest usually exports substantial power to California. At other times, California may export power to the Northwest. As the outages that cascaded across the West in 1996 demonstrated, the reliability of the entire Western Interconnection is highly dependent on the efficient operation of all component systems and the adequacy of generation resources to serve expanding load.

During several periods in June 2000, the Northwest experienced a dramatic upturn in spot market prices for electricity sold at wholesale. For example, according to data reported in Megawatt Daily, the maximum price paid for a standard 16-hour daily block of electricity on both June 15 and 16, 2000 was \$400/MWh. On June 27, the maximum price paid was \$800/MWh with the price remaining in the \$500-625/MWh range on June 29 and 30 at certain trading hubs. By contrast, historical trading prices in the region have been less than \$100/MWh.

Maximum prices paid in the Northwest peaked again in the first week of August, exceeding \$400/MWh for a similar block of electricity. Apart from the peak periods in June and the first week of August, maximum prices paid this summer generally have ranged from \$35/MWh to \$250/MWh, with prices below \$200/MWh in most weeks.

The fact that high prices for spot purchases were experienced during these periods does not mean that all electricity sold was priced at this level. First, the Megawatt Daily prices quoted above are the maximum price paid for 16-hour blocks of spot power on those dates and do not represent the average of spot prices paid by all buyers or even necessarily by an individual buyer. Second, in most instances (excluding California), purchasers do not rely exclusively on the spot market for their electricity needs. Most power in the Northwest is sold outside of the spot market through "bilateral" contracts. Moreover, purchasers routinely use a variety of hedging and forward contracts to manage spot price volatility risk. In this way, purchasers of electricity, whether utilities with service obligations or large industrial customers that directly negotiate service contracts

with electricity suppliers, have the ability to protect themselves at least in part from unanticipated changes in spot market prices.

As you know, wholesale price increases have also occurred this summer in California. For example, prices in California for June and July of 1999 rarely exceeded \$150/MWh, while prices for the same period this year are reported to have exceeded \$250/MWh in 167 hours and \$500/MWh in 59 hours.

It is important to point out the differences between the California and Northwest wholesale markets. California has required its investor-owned utilities to divest ownership of the bulk of their generation capacity, so most electricity in California is purchased at wholesale. Load-serving utilities in the Northwest, in contrast, have not been required to divest generation and thus are less dependent on purchases in the wholesale market. California has a centralized power exchange (the California Power Exchange) and requires investor-owned utilities to purchase through this exchange. There is no centralized market in the Northwest. The California market clears at a single price while prices in the "bilateral" market in the Northwest reflect individually negotiated prices. The California utilities and their state regulators were very cautious about undertaking long-term contracts and other price hedges and thus relied very heavily on the spot market. The utilities in the Northwest are not under the same constraints.

In response to price volatility in California, the Northwest, and the Northeast this summer, the Commission directed Commission staff to investigate wholesale market conditions in various parts of the country and to determine any technical or operational

factors, regulatory prohibitions or rules (federal or state), market rules, behaviors, or other factors affecting the levels of pricing of electric energy and the reliability of service. The Commission instructed staff to report its findings to the Commission by November 1, 2000. The staff is hard at work on completing this investigation. Based on the staff's report to the Commission, I expect that the Commission will act quickly to implement whatever further measures may be necessary to address the issues we are discussing today.

Without prejudging the results of the staff investigation, it appears that the price increases in the Northwest this summer were caused by several factors: (1) the Northwest region experienced record and near-record high temperatures during parts of June 2000; (2) regulated flows and electrical output at hydroelectric facilities in the region were lower than normal in June; (3) a significant amount of generating capacity was out of service for various reasons; (4) natural gas prices have increased, raising the cost of running natural gas generating units; and (5) additions of new generation facilities have not kept pace with the region's growing demand for electricity.

Given the highly integrated nature of the Western electrical systems, it is fair to ask the extent to which circumstances in California this summer affected wholesale prices in the Northwest. Pending completion of the staff report on bulk power markets, I do not yet have conclusive information about the relationship between price volatility in the Northwest and market conditions in California. One can expect, however, that a seller of electricity that has the option of selling its power in multiple markets likely will choose to

sell in the market that offers the highest price. I do not therefore discount the possibility that prices in California may have influenced the prices asked to supply electricity to the Northwest or other Western markets.

In addition to high demand in California and throughout the West, minimal capacity additions and high natural gas prices, a number of other factors may have contributed to price volatility this summer in California's wholesale markets, including:

- o California-regulated wholesale buyers purchased unusually large amounts of their power in the spot market, which often has higher prices, instead of purchasing power under long-term contracts or hedging their purchases.
- o Rates for most retail buyers are averaged over time (for example, a monthly bill based on total electricity used during the month) so that customers have little incentive to reduce their usage during peak hours when electricity costs are highest.
- O Purchasers in California's wholesale markets may have inappropriate incentives to delay scheduling their purchases, requiring the California Independent System Operator to obtain power for their needs at the last minute.
- o The wholesale market rules in California may not be working efficiently. For example, the Commission has ordered the California Independent System Operator to redesign its rules for managing transmission congestion.

In addition, some observers believe that sellers in California have engaged in collusion or other anticompetitive behavior. These allegations are being investigated.

While a combination of these and other factors may have contributed to recent conditions in California's markets, my preliminary view is that the fundamental issue is an overall imbalance of supply and demand. When demand increases and supply does not, prices can be expected to go up. Nevertheless, wholesale market rules and structure may have exacerbated and sustained the resulting price increases.

III. Development of Regional Transmission Organizations

The Commission is striving to adapt wholesale power market structures to the new realities of the electric industry, including the advent of competitive generation sources, the presence of unregulated entities in the energy services market, and advances in gas turbine technology and distributed generation. To make wholesale markets in the Northwest and elsewhere more efficient, the Commission has emphasized the importance of forming regional transmission organizations (RTOs). The key to bigger and more competitive markets is more centralized administration of the transmission network and the elimination of the barriers to efficient transactions and increased investment. Last year, the Commission pursued that objective by issuing Order No. 2000, which encouraged the voluntary, rapid formation of RTOs. In brief, an RTO is an electric transmission system operator that is independent from power market participants and is responsible for providing reliable, efficient, and non-discriminatory transmission service across an entire region. RTOs may be formed as independent system operators (ISOs), which are regional entities that operate transmission facilities owned by others; independent transmission-only companies (transcos) that both own and operate a regional transmission system; or some combination of these institutions.

If properly constituted and truly independent, RTOs can help address and eliminate remaining obstacles to competition and make the markets more efficient. First,

RTOs can be structured to eliminate "pancaking" of transmission rates that raises the cost of moving power across multiple utility systems. Second, RTOs that have the proper tools can better manage transmission congestion, reduce the instances when power flows on transmission lines must be decreased to prevent overloads, and effectively solve short-term reliability problems. Third, RTOs will ensure that vertically-integrated transmission-owning utilities do not discriminate in favor of their own generation over another seller's generation. Fourth, RTOs can facilitate transmission planning across a multi-state region and, by operating the grid as efficiently as possible, may give confidence to state siting authorities that new transmission facilities are proposed only when truly needed.

IV. The Northwest Collaborative Process

In Order No. 2000, the Commission made an unprecedented commitment to support collaborative processes throughout the nation to encourage parties to develop concrete and workable RTO proposals for filing this month. The Commission committed many staff members to this process. The Commission staff facilitated countless meetings across the country for eight months. Five large RTO workshops were conducted by the Commission in March and April to kick off these collaborative processes. The RTO Workshop for the Western Interconnection was held on March 23-24 in Las Vegas, Nevada and was attended by more than 500 participants.

Following the RTO Workshops, multi-party negotiations were initiated in virtually every part of the country. In the Northwest, an extraordinary group of regional leaders

came together to discuss the dozens of legal and operational issues involved in forming an entity now known as RTO West. The geographic area to be covered by the RTO West region includes the states of Washington, Oregon, Idaho, Montana, Utah, Nevada and part of Wyoming. In addition, it is anticipated that the Canadian Provinces of British Columbia and Alberta will participate in some manner. The RTO West Regional Representatives Group (RRG) is a diverse group that formed the core for discussions among parties regarding the RTO filing that they intend to make on October 16. The RRG has some 50 representatives from 18 areas of interest, including investor-owned utilities, Bonneville, state government/regulatory interests, rural electric cooperatives, residential and industrial customers, independent power producers, power marketers, Sovereign Tribes, and Canadian interests. Since its initial meeting on May 3, 2000 in Portland, Oregon, the RRG and its nine working groups have held more than 100 formal meetings. The Commission's staff has worked closely with the RTO West participants to provide guidance, technical support and encouragement during the process. In other words, the FERC did not simply lay out the terms of industry restructuring and leave the hard work to others. In every region, our staff has worked hard with all interest groups to produce concrete results. Consequently, I expect that RTO West will make an extensive filing with the Commission later this month, seeking to demonstrate compliance with all of the Commission's standards for RTOs.

I can say without hyperbole that the good faith and hard work of all Northwest market participants -- Bonneville, the investor-owned utilities, the public utility districts,

and other stakeholders -- has set a national benchmark for regional market transformations. The Bonneville Administrator has performed in exemplary fashion, which is essential given the importance of her organization to the regional market. In sum, the Northwest has made dramatic strides in helping itself through the transition to competitive regional bulk power markets. I commend these efforts to you.

V. Other Actions to Ensure That Wholesale Markets Work

In addition to the broad investigation of bulk power markets that the Commission requested of its staff and the Commission's efforts to facilitate formation of RTOs, the Commission also has opened a second proceeding addressing California's wholesale markets. In July of this year, San Diego Gas & Electric Company filed a complaint with the Commission, seeking immediate imposition of a seller's price cap of \$250/MWh for all public utility sellers in the California ISO and power exchange (PX) markets. Due to the operation of California law, a rate freeze on SDG&E's retail rates ended, and wholesale costs were suddenly flowed directly through to San Diegans without any buffer. The resulting storm of protest and concern has focused both the Commission and California on curbing high prices. On August 23, the Commission ruled on this complaint. The Commission instituted formal hearing proceedings under FPA section 206 to investigate the justness and reasonableness of the rates of public utility sellers in the California ISO and PX markets, and also to investigate whether the tariffs, contracts, institutional structures, and bylaws of the ISO and PX are adversely affecting the efficient operation of competitive wholesale power markets in California and need to be modified.

The Commission was unable to grant SDG&E's request for a seller's price cap because SDG&E had not provided sufficient evidence to support immediate imposition of such a cap. However, the Commission left undisturbed the ISO's \$250 per MWh purchase price cap, which in my view has served to mitigate price volatility and keep rates below that level during the remainder of California's summer peak.

The formal section 206 hearing, unlike the staff investigation discussed above, focuses only on the California ISO and PX markets. The formal hearing will allow the Commission to take a range of actions, if warranted by the evidence, including changing the market rules for the ISO and PX, setting new rates for transactions into the ISO and PX, or ordering refunds for transactions during the pendency of the hearing. Our actions on the California market issues will affect the Western market as a whole and will probably lay down some important markers for the future development of this industry.

While the Commission has taken a number of actions so far and may take others soon, the development of effective competition also depends on continued efforts by market participants. As I described above, RTO West has made significant effort this year toward forming an RTO that will meet the Commission's criteria, and such an RTO will provide important benefits if it is implemented. However, more can be done to benefit consumers by increasing competition, efficiencies, and investments in Western wholesale markets. The extensive trading of electricity between the Northwest and California is only one example demonstrating the need for such regional coordination. Specifically, other RTOs are being pursued in parts of the Western Interconnection and

these RTOs, if approved and established, must work on reducing the operational and pricing barriers at the "seams" between the RTOs. As required in Order No. 2000, RTOs must ensure the service reliability within the Interconnection. RTOs also must ensure that market rules and practices do not unduly impede the ability of market participants to trade across regional boundaries.

Today, however, the Commission has its hands tied in promoting timely competitive results. The Congress can assist us in making this transition to competitive wholesale markets as short as possible, so that American consumers can reap the rewards, and not just the risks, of competition. I believe Congress should enact legislation that:

- (1) places all electric transmission in the continental United States under the same rules for non-discriminatory open access and comparable service;
- (2) reinforces the Commission's authority to foster regional transmission organizations (RTOs);
- (3) establishes mandatory reliability rules to protect the integrity of transmission service, relying on a self-regulating organization with appropriate federal oversight of rule development and enforcement; and,
- (4) provides the Commission with adequate authority to remedy market power. The other components of balanced restructuring legislation for the bulk power market are reform or repeal of the Public Utility Holding Company Act and clarification of the scope of federal jurisdiction over transmission in relation to "bundled" retail service.

While each of these legislative reforms is important, the issues we are discussing today emphasize the Commission's need for effective tools to address market power. Currently, the Commission has only limited remedies available to address market power problems. Under current law, the Commission can prevent enhancement of market power in the context of utility mergers or other corporate transactions that are authorized under FPA section 203. However, this authority does not extend to market power that is already part and parcel of the traditional commercial and operational arrangements that accompany vertical integration and monopoly utilities. Although the Commission also can address market power by denying or revoking authorization for market-based wholesale rates, the effect of this remedy is simply to re-regulate or re-impose cost-based rates, doing nothing to promote efficiency or competition in the energy marketplace. And, in California or other states where generation plants have recently been sold at well above book value (with the proceeds being used to mitigate the stranded cost charges otherwise imposed on ratepayers), cost-based rates may not necessarily result in lower prices to consumers.

Regulators must be permitted to keep up with the challenges posed by market power in evolving markets. Without such reforms, and without adequate remedial authority, market power could be used to impair competition and the related benefits to consumers. The Administration's restructuring bill, S. 1047, would give the Commission explicit authority to address market power in wholesale markets by requiring a public utility to file and implement a market power mitigation plan. It also would allow the

Commission to address market power in retail markets, if asked to do so by a state lacking adequate authority to address the problem. I believe it would be helpful to close the gaps in the Commission's remedial authorities. In my view, the key to good public policy in this area is to free markets to work and to empower the Commission to ensure their fundamental fairness and soundness.

Comprehensive legislation that addresses the concerns above is preferable. Reliability is a critical piece of any restructuring legislation and, given the wide agreement about its importance and the "consensus" approach sponsored by the North American Electric Reliability Council (NERC), I can appreciate why stand-alone reliability legislation, such as the bill introduced by Senator Gorton and approved by the Senate, seems attractive. The Commission is unquestionably willing to implement such legislation as soon as it is enacted. I do not oppose such an approach, but I would emphasize that the reliability title is only part of what it will take to ensure service quality. Equally important as an effective standard-setting and enforcement mechanism is implementation of workable markets. The Congress can ensure that we achieve that goal by enacting at least the four measures identified above. Moreover, only comprehensive legislation will address the critical need faced by the West today – the need for competitive market conditions that will attract investment in new generating capacity in the region to address the growing demand for electricity.

VI. Conclusion

Recent aberrant prices in evolving and complex electricity markets are cause for great concern. We must create the conditions where the supply/demand imbalance in the West will be corrected by new investment in infrastructure, greater efficiency, and appropriate demand responses. This requires strong regulatory action, not a meandering transition with uncertain results. Price spikes are also a timely reminder that, while we are involved in the exciting work of re-inventing this large and critically important industry, we must look diligently after consumer needs throughout this difficult transition. We must do so because electricity is so essential to people's lives that it cannot always be rationed purely by price in any and all circumstances. We must also do so to ensure that competitive market initiatives are not summarily reversed before their benefits to the public are fully realized.

In conclusion, if competitive markets are not yet working well, our current investigation will allow us to identify the problems and, within existing authority, take appropriate remedial action. The Commission remains committed to effective competition in wholesale power markets as the best means to ensure a reliable power supply at reasonable rates.

Thank you for your consideration of my remarks. I will be pleased to answer any questions which you may have.